1. With all due respect to the Fire Department, the water supply appears inadequate to fight an established mulch fire, based on the established history of area mulch fires. Based on the draft, the following applies:

> "If the operation is located outside of a municipal water supply the following will apply. AHJ will require a reliable certified water supply system with the capability to supply 1000 gallons per every 10,000 cubic feet of product. The supply system must be capable of producing a minimum of 250 gpm (preferred is 500gpm) for at least 2 hours.
>
> If this is a static water supply it is to be certified by an engineer and capable to supply the amount needed above. If it is below the minimum amount then it must be capable of at least 30,000 gallons at all times. The maximum size of water supply needed may be based on the proposed operation and approved by the AHJ."

Therefore,
250gpm X 120 minutes = 30,000 gallons (the size of a Howard County fire water cistern tank), and
500gpm X 120 minutes = 60,000 gallons (2 Howard County cistern tanks).
However, "if it is below the minimum", then 30,000 applies.

Note: In contrast, a minimum size of 400,000 gallons was recommended by a Fire Protection Engineer at a TF presentation (in response to a question concerning what an adequate substitute for a municipal fire hydrant might be).

DFRS Response (from A/C Daniel G. Merson) – Research was performed on many standards, codes and regulations throughout the nation and a definitive amount of water is not recommended anywhere. I also researched other State Fire Marshal codes in States that are more prevalent to wood processing. These states included Washington, Maine, Oregon and Virginia and none of them have a specified water and/or pressure amount that I could find.

As key to any fire the critical components are early detection, quick firefighting response, and the ability to put water on the seat of the fire. It is felt that having a secured water source on sight will allow Fire and Rescue to initiate suppression operations quickly. It is possible that additional water supply might be needed but this can be established while suppression operations are underway.

HCDFRS has a record of good response times to emergencies. These emergencies are dispatched to have an adequate firefighting force dispatched to the stated emergency. With the closest station being within five travel miles of the location, adequate personnel responding and a certified water source on the property it gives us the best opportunity to extinguish the fire.

2. This sentence is incomplete.

> "The Mulch/Wood Processing operations shall have located within 5 travel miles of the location."

Does it mean to refer to distance to a fire station, or distance to a fire hydrant, or other?

Fire Station See response to Mr. Meyers email.

3. It is unclear what constitutes a water supply that is "certified by an engineer".

We recommend more specific language as follows.

"The water supply shall be designed, or evaluated, by a licensed Professional Engineer (Fire Protection Engineering specialty), and that a signed and sealed report be provided to the HCFRS for their review. The evaluation and report are to be prepared in accordance with applicable Standards of the National Fire Protection Association, as adopted by the Maryland State Fire Prevention Code and the Howard County Fire Code."

Fire and Rescue is okay with the proposed wording for the certified water source.